Nut production

Walnut trees begin producing nuts when they are about 10 years old, but the best nut production begins when trees are 30 years old. Good nut crops occur in about two out of five years. Open-grown trees with large crowns produce more nuts than woods-grown trees with small crowns, but the number of nuts, frequency of nut crops, and quality of nuts (percentage of kernel to shell, by weight) vary greatly from tree to tree.

The timber value of good nut trees usually is low because of their short butt logs, numerous knots, wide growth rings, and high percentage of light-colored sapwood. However, nut plantations can be grown on poorer quality sites than timber plantations.

Allow 200 to 300 square feet of growing space around each tree at the time of establishment (Table 1). Gradually thin to about half this density as trees mature. Keep other trees and shrubs from invading. Sod reduces nut production, but also reduces soil erosion and may discourage other plants from invading that would make nut collection difficult.

Type of plantation	Spacing within and between rows	s (ft.) Trees per acre
	7 x 7	889
	8 x 8	681
Timber production	9 x 9	538
	10 x 10	436
	12 x 12	303
Timber & nut production	12 x 12	303
	15 x 15	194
	17 x 17	151
Agroforestry	6 x 30	242
	6 x 40	182
	8 x 30	182
	8 x 40	136
	10 x 30	145
	10 x 40	109

Table 1.Suggested spacing and numbers of tree to plant per acre by type of plantation.

To determine the number of trees to plant at other spacings, multiply your proposed spacing in feet within rows by the spacing in feet between rows and divide into 43,560 square feet per acre:

43,560 square feet per acre = trees per acre / (spacing in feet within rows) X (spacing in feet between rows)